What is claimed is:

1. A method of producing reduced iron comprising the steps of:

reducing raw material pellets obtained by pelletizing the mixture of an oxide iron powder and a carbonaceous powder in an rotary bed-type direct reducing furnace;

melting the reduced iron pellets obtained by said reducing process in a sealed-type electro-blast furnace; and the method further comprising:

introducing a reducing gas composed mainly of CO_2 and reproduced in said sealed-type electro-blast furnace into said rotary bed-type direct reducing furnace at a portion adjacent to the discharging portion of the reduced iron pellets.

2. A production facility for producing reduced iron comprising:

a rotary bed-type direct reducing furnace for producing the reduced iron pellets from the raw material pellets composed of the iron oxide powder and the carbonaceous material powder;

a sealed-type electro-blase furnace for melting said reduced iron pellets; and

a reducing gas introducing means for introducing a reducing gas composed mainly of CO_2 and reproduced in said sealed-type electro-blast furnace at the position adjacent to the reduced iron pellets discharging portion of said rotary bed-type direct reducing furnace.

3. A production facility according to claim 2, wherein said reducing gas introducing means comprises:

a gas holder for collecting the reducing gas reproduced in the sealed-type blast furnace; and

a nozzle which is connected with said gas holder through a pipeline, and which is disposed passing through the furnace wall at a position close to the reduced iron pellet discharging portion for introducing the reducing

gas into the reduced iron discharging portion of the direct reducing furnace.

4. A method of producing reduced iron pellets by the steps of reducing the raw material pellets obtained by cooling the reduced iron pellets after reducing the raw material pellets of the mixture of a iron oxide powder and a carbonaceous material powder, the method further comprises a step of:

applying rolling to the reduced iron pellets while being maintained within the temperature range of 800 to 1200℃.

5. A method of producing reduced iron pellets according to claim 4, wherein rolling of the reduced iron pellets is applied for more than 3 minutes and less than 20 minutes.

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6. A production facility for producing reduced iron pellets comprises:

a reducing furnace for obtaining the reduced iron pellets by heating and reducing the raw material pellets composed of the iron oxide powder and the carbonaceous material powder;

a heat retaining and rolling portion for executing rolling the heated reduced iron pellets after receiving them from the reducing furnace, while retaining the heat of the pellets; and

a cooler for cooling said reduced iron pellets after receiving from the heat retaining and rolling portion.

7. A production facility for producing reduced iron pellets according to claim 6, wherein said cooler is a cylindrical cooler and said heat retaining and rolling portion is apart from said cooler.

8. A production facility for producing reduced iron pellets according to claim 7, wherein said heat retaining and rolling portion is formed by lining the inside of said cooler by a insulating material.

9. A method of reducing wet raw material pellets comprising the steps of charging the wet raw material pellets on the rotary bed of the rotary bed-type reducing furnace and reducing said wet raw material pellets by heating thereof in said reducing furnace, the method further comprising the steps of:

forming a bed covering layer by covering the rotary bed of the rotary bed-type direct reducing furnace immediately before charging the wet raw material pellets by insulating material particles having a higher melting point than the heating temperature in said reducing furnace for reducing the raw material pellets; and

charging the wet raw material pellets on said bed covering layer.

10. A method for reducing the wet raw material pellets according to claim 9, wherein said insulating material particles are selected from the group consisting of particles made of limestone, dolomite, or basic oxide mixture composed of lime stone and dolomite.

11. A rotary bed-type reducing furnace comprising a wet raw material pellets charging device for producing reduced iron pellets by reducing the wet raw material pellets charged by said wet raw material pellets charging device on the rotary bed of said rotary bed-type reducing furnace, said rotary bed-type reducing furnace further comprises:

an insulating material particle supplying device for forming a bed covering layer by covering the rotary bed with the insulating material particles having a higher melting temperature than the heating temperature of the reducing furnace.

12. A rotary bed-type reducing furnace according to claim 11, wherein said insulating material particles supplying device comprises:

a first hopper for storing said insulating material particles; and

a second hopper which receives said insulating material particles

discharged from said first hopper and which comprises an opening at the bottom such that the opening faces to the rotary bed of the reducing furnace leaving a space therebetween.

13. A rotary bed-type reducing furnace according to claim 12, wherein said insulating material particles are selected from the group consisting of particles made of limestone, dolomite, or a basic oxide mixture composed of lime stone and dolomite.

14. A method of forming raw material pellets comprising the steps of forming pellets by adding adjusting water to a mixture of an iron oxide powder, a coal powder, and a binder comprising a hydrocarbon-type material, and drying said pellets for preparing raw material mixed pellets; wherein the binder material is selected from either one or both of carboxymethylcellulose and polyvinylalcohol, and tar.

15. A method of forming raw material pellets according to claim 14, wherein the step of drying said pellets containing adjusting water is carried out in an atmosphere at a temperature higher than 150℃.

16. A method of producing raw materials pellets according to claim 15, wherein, said binder comprises at least 0.2 wt% of either carboxymethylcellulose or polyvinylalcohol, and more than 5 wt% of tar.

17. A method of producing raw material pellets according to any one of claims 14 and 15, wherein said binder comprises more than 0.2 wt% of a mixture of carboxymethylcellulose and polyvinylalcohol.

18. A method of producing raw material pellets according to any one of claims 14 and 15, wherein said binder comprises 4 wt% of tar and more than 0.2 wt% of a mixture of carboxymethylcellulose and polyvinylalcohol.

19. A method of producing raw material pellets according to any one of claims 14 and 15, wherein said binder comprises more than 0.2 wt% of a mixture of carboxymethylcellulose and polyvinylalcohol, and bentonite in a range of 0.3 to 0.6 wt%.

20. A pellet charging device for charging the raw material pellets on the rotary bed of the rotary bed-type reducing furnace, the device comprising:

a rotating drum having a truncated conical side surface rotatable around the central axis, located beyond the rotary bed of the reducing furnace;

a hopper for supplying the raw material pellets on the side surface of said rotating drum; and furthermore,

the central axis of the rotating drum is located within a plane including the rotational axis of the rotary bed, the rotating drum is inclined toward the rotary bed such that the upper cross-line between said side surface of the rotating drum and said plane is parallel to the rotary bed, and the vertical angle of the conical rotating drum is set such that the ratio of the rotating directional speeds of side surfaces beyond the inside and outside peripheries of the rotary bed coincides with the ratio of rotating directional-speeds of the rotary bed at both inside and outside peripheries.

21. A pellet charging device according to claim 20, wherein said hopper comprises a supplying port, which opens facing toward the rotary bed of the reducing furnace, for supplying the raw material pellets, wherein a distance between the ports and the rotary bed is set such that the raw material pellets supplied from the port are arranged to form a layer of pellets on the surface of the rotating drum.

22. A pellet charging device according to any one of claims 20 and 21, wherein the rotating directional speed of said rotating drum is established

such that each point on the upper side surface of said rotating drum is equal or an integer times of the moving speed of the rotary bed, and the rotational direction of the rotating drum is opposite to the rotational direction of the rotating drum.